Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently amended) A method of detecting DNA markers in a sample, comprising:

providing a cell-free bone marrow sample from a subject; and

detecting one or more DNA markers in the sample, wherein the DNA markers are indicative of LOH or DNA hypermethylation, or the DNA markers are indicative of DNA mutation in KRAS or BRAF gene.

2. (Original) The method of claim 1, wherein the DNA markers are in the 1p, 3p, 6p, 6q, 8p, 10q, 11q, 14q, 16q, or 17p region.

3. (Canceled)

4. (Original) The method of claim 1, wherein the DNA markers include D1S228, D8S321, D4S175, D4S1586, D5S299, D8S133, D8S261, D8S262, D8S264, D9S171, D10S197, D10S591, D10S532, D14S51, D14S62, D15S127, D16S421, D16S422, D17S796, D17S849, D17S855, D18S58, D18S61, or D18S70.

5. (Original) The method of claim 1, wherein the DNA markers are indicative of hypermethylation in RASSF1A, MGMT, GSTP1, RAR-ß, TWIST, APC, DAPK, P16, or Cyclin D2 promoter.

6. (Canceled)

7. (Currently amended) A method of detecting cancer, comprising

providing a cell-free bone marrow sample from a subject; and

detecting one or more DNA markers in the sample, wherein LOH, or hypermethylation~~, or mutation~~ of the markers is indicative of cancer in the subject, or wherein the markers include KRAS or BRAF, and mutation of the markers is indicative of cancer in the subject.

8. (Original) The method of claim 7, wherein the cancer is melanoma, neuroblastoma, colorectal, breast, or prostate cancer.

9. (Currently amended) A method of staging cancer, comprising

providing a cell-free bone marrow sample from a subject suffering from cancer; and

detecting one or more DNA markers in the sample, wherein LOH, hypermethylation, or ~~motation~~ mutation of the markers is indicative of an advanced stage of the cancer in the subject.

10. (Original) The method of claim 9, wherein the cancer is melanoma, neuroblastoma, colorectal, breast, or prostate cancer.

11. (Original) A method of prognosing cancer, comprising

providing a cell-free bone marrow sample from a subject suffering from cancer; and

detecting one or more DNA markers in the sample, wherein LOH, hypermethylation, or mutation of the markers is indicative of a poor prognosis of the cancer in the subject.

12. (Original) The method of claim 11, wherein the cancer is melanoma, neuroblastoma, colorectal, breast, or prostate cancer.

13. (Currently amended) A method of detecting LOH and DNA hypermethylation, comprising

providing a serum or plasma sample from a subject; and

detecting a combination of LOH and DNA hypermethylation in the sample.

14. (Canceled)

15. (Currently amended) ~~The method of claim 13,~~ A method of detecting LOH and DNA hypermethylation, comprising

providing a sample from a subject; and

detecting a combination of LOH and DNA hypermethylation in the sample, wherein the LOH is indicated by one or more DNA markers that include D1S228, D8S321, D4S175, D4S1586, D5S299, D8S133, D8S261, D8S262, D8S264, D9S171, ~~D10S197,~~ D10S591, D10S532, D14S51, D14S62, D15S127, D16S421, D16S422, D17S796, D17S849, D17S855, D18S58, D18S61, or D18S70.

16. (Currently amended) ~~The method of claim 13,~~ A method of detecting LOH and DNA hypermethylation, comprising

providing a sample from a subject; and

detecting a combination of LOH and DNA hypermethylation in the sample, wherein the DNA hypermethylation is detected in RASSF1A, MGMT, GSTP1, RAR-ß, TWIST, APC, DAPK, ~~P16, KRAS, BRAF,~~ or Cyclin D2 promoter.

17. (Currently amended) A method of detecting cancer, comprising

providing a serum or plasma sample from a subject; and

detecting one or more DNA markers in the sample, wherein a combination of LOH and hypermethylation of the markers is indicative of cancer in the subject.

18. (Currently amended) ~~The method of claim 17,~~ A method of detecting cancer, comprising

providing a sample from a subject; and

detecting one or more DNA markers in the sample, wherein ~~the cancer is~~ a combination of LOH and hypermethylation of the markers is indicative of melanoma, neuroblastoma, colorectal, ~~breast,~~ or prostate cancer in the subject.

19. (Canceled)

20. (Original) A method of staging cancer, comprising

providing a sample from a subject suffering from cancer; and

detecting one or more DNA markers in the sample, wherein a combination of LOH and hypermethylation of the markers is indicative of an advanced stage of the cancer in the subject.

21. (Original) The method of claim 20, wherein the cancer is melanoma, neuroblastoma, colorectal, breast, or prostate cancer.

22. (Original) The method of claim 20, wherein the sample is a serum, plasma or tissue sample.

23. (Original) A method of prognosing cancer, comprising

providing a sample from a subject suffering from cancer; and

detecting one or more DNA markers in the sample, wherein a combination of LOH and hypermethylation of the markers is indicative of a poor prognosis of the cancer in the subject.

24. (Original) The method of claim 23, wherein the cancer is melanoma, neuroblastoma, colorectal, breast, or prostate cancer.

25. (Original) The method of claim 23, wherein the sample is a serum, plasma or tissue sample.

26-31. (Canceled)